WISCONSIN ENDANGERED RESOURCES REPORT #123
STATUS OF THE AMERICAN MARTEN IN WISCONSIN
PERFORMANCE REPORT, 1 JULY 1999 THROUGH 30 JUNE 2000
By Adrian P. Wydeven, James E. Ashbrenner, & Jane E. Wiedenhoeft

SUMMARY

A total of 22 marten tracks were detected along 139.2 miles of survey routes in northern Wisconsin, including 10 along 80.9 miles in the Nicolet National Forest, and 12 along 58.3 miles in the Chequamegon National Forest. Rate of observations for marten was 20.6 marten/100 miles of tracking on the Chequamegon National Forest and 12.4 marten/100 miles on the Nicolet National Forest. The higher observation rate on the Chequamegon may have been partially due to surveys conducted later in winter. A marten committee was formed during the study period and met in March 2000.

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STATUS OF THE AMERICAN MARTEN PERFORMANCE REPORT

July 1, 1999 – June 30, 2000

Prepared by: Adrian P. Wydeven, James E. Ashbrenner, & Jane E. Wiedenhoeft

Job: 106.2.1 Monitor population
106.2.2 Determine recovery levels
106.2.3 Enhance population
106.2.4 Communications

Background: American marten (*Martes americana)* also known as pine marten, were extirpated from Wisconsin in the 1920's, and were listed as a state endangered species in 1972. Martens were reintroduced to the northern Nicolet National Forest of northeast Wisconsin between 1975-1983 (172 martens released), and in the Chequamegon National Forest near Clam Lake, in northwest Wisconsin between 1987-1990 (139 martens released).

The 1986 Pine Marten Recovery Plan for Wisconsin set a goal of 300 marten for the Nicolet, and release of 100 martens in the Chequamegon National Forest. These goals were probably met in the early 1990's, but martens do not seem to have spread extensively from refuge areas established on both national forests in the 1950's and 1960's to protect reintroduced fisher (*Martes pennanti)*. Annual monitoring will need to continue to assess the marten population and determine the need for additional stocking sites. Additional modeling and monitoring may be necessary to determine if recovery goals are being met.

JOB 106.2.1 MONITOR POPULATION

Standardized survey routes to assess marten abundance and distribution were established in the Nicolet National Forest in 1983 and in the Chequamegon National Forest in 1991. Track counts were done by driving 3-5 routes in the Nicolet and 3 routes in the Chequamegon National Forest following methods described by Ashbrenner (1994).

Results and Discussion:

Nicolet surveys were conducted in December and January, and Chequamegon routes were run in December and March. Snow depth varied from 2 to 14 inches. Ten marten were detected along 80.9 miles in the Nicolet for a rate of 12.4 marten/100 miles. This rate was half of last years rate (23.9/100 miles), but similar to previous years.

Twelve marten were detected along 58.3 miles surveyed in the Chequamegon. The observation rate of 20.6 marten/100 miles was higher than most recent years, and higher than the Nicolet. This higher rate may be partially due to 2 surveys in March when activity by marten may have been greater. Generally the rates have ranged between 10 to 16 marten/100 miles for both forests.

The ratio of marten tracks to fisher was 1 marten per 3.4 fisher in the Chequamegon, and 1 marten per 1.9 fisher in the Nicolet. Generally, this ratio has averaged less than 3 fisher per marten in the Nicolet, but more than 3 fisher per marten in the Chequamegon. The continued high count on fishers suggests that not many fisher tracks are being mistaken for marten. It appears that fisher may be more abundant in the Chequamegon than in the Nicolet.

Other carnivores detected included mink, otter, coyote, bobcat, dog, fox, wolf, raccoon and bear. Wolf were only detected in the Chequamegon and continue to be detected at rates of 7 to 10 per 100 miles. Raccoon and bear were only detected in the Chequamegon, also indicating the lateness of the survey. Fox have generally been most abundant in the Chequamegon and this year's surveys again showed that trend. Coyote and bobcat were more abundant in the Chequamegon, but in most years they have been more frequent in the Nicolet. Again, activity may have been greater for these species because of the late survey.

JOB 106.2.2 DETERMINE RECOVERY LEVELS

A marten committee was formed during the study period and included membership by DNR, Forest Service, and Great Lake Indian Fish and Wildlife Commission. The 12 committee members met on 1 March 2000 in Park Falls to discuss recent research, current status, and the recovery plan. It was agreed that current status could not be adequately determined until surveys and observation reports of marten are summarized and examined. Work on assessing marten status was begun, in cooperation with the Forest Service.

JOB 106.2.3 ENHANCE POPULATION

Future stocking sites for marten were discussed at the marten meeting on March 1, but a more careful review of existing status is necessary before planning new stocking sites. The last stockings were completed in the Chequamegon National Forest in 1990.

JOB 106.2.4 COMMUNICATION

American marten surveys were published in the Wisconsin Wildlife Surveys report (Wydeven et. al. 2000) and marten observations were reported in Wisconsin Wildlife Surveys under Rare Mammal Observations (Wydeven and Wiedenhoeft, 2000). Discussion of marten status and management were held at the following: Volunteer Carnivore Trackers at Tomahawk on 1 December 1999; Loggers' Conference in Cable on 30 March 2000; and DNR Citizens' Academy in Peshtigo on 9 May 2000.

Literature Cited

Ashbrenner, J. E. 1994. Distribution of marten in the Nicolet National Forest 1994. Wisconsin Wildlife Surveys. 4(1): 96-102.

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Table 1. *Furbearer track observations along marten survey routes in northern portions of the Nicolet National Forest, winter 1999-2000.*

Number of Tracks Observed								
Date	**Route No.**	**Snow Depth (in.)**	**Miles Run**	**Marten**	**Fisher**	**Coyote**	**Bobcat**	**Other**
1/3/00	1	14	29.6	4	7	6	1	1 fox 1 porcupine
12/16/99	2	6	22	4	6	11	1	2 fox 2 porcupine
1/15/00	3	13	29.3	2	6	9	0	1 dog 4 otter
Total			**80.9**	**10**	**19**	**26**	**2**	**3 fox** **3 porcupine** **1 dog** **4 otter**
1999 – 2000 tracks / 100 mi (route 1-3)				12.4	23.5	32.1	2.5	3.7 fox 3.7 porcupine 1.2 dog 4.9 otter
1998 – 1999 tracks / 100 mi (route 1-3)				23.9	27.7	27.7	5	3.8 fox 6.3 otter
1997 – 1998 tracks / 100 mi (route 1-3)				11.9	26.2	41.6	2.4	2.4 fox 3.6 otter
1996 – 1997 tracks / 100 mi (route 1-3)				13.8	37.9	36.8	5.7	4.6 fox 2.3 otter 2.3 porcupine 1.1 bear
1995 – 1996 tracks / 100 mi (route 1-3)				11.0	36.7	11.0	2.8	11.9 fox

Table 2. *Furbearer track observations along marten survey routes near Clam Lake in the Chequamegon National Forest, winter 1999-2000.*

Number of Tracks Observed								
Date	**Route No.**	**Snow Depth (in.)**	**Miles Run**	**Marten**	**Fisher**	**Coyote**	**Bobcat**	**Other**
12/17/99	1	3	22.1	4	10	10	1	1 dog 6 fox 2 porcupine
3/29/00	2	2	17.9	5	16	10	4	2 mink 8 otter 1 dog 4 fox 2 wolf 2 racoon
3/16/00	3	10	18.3	3	15	4	2	3 otter 1 dog 3 fox 3 wolf
Total			**58.3**	**12**	**41**	**24**	**7**	**2 mink** **11 otter** **3 dog** **13 fox** **5 wolf** **2 porcupine** **2 racoon**
1999 – 2000 tracks / 100 mi (route 1-3)				20.6	70.3	41.2	12	3.4 mink 18.9 otter 5.1 dog 22.3 fox 8.6 wolf 3.4 porcupine 3.4 racoon
1998 – 1999 tracks / 100 mi (route 1-3)				23.9	27.7	27.7	5	3.8 fox 6.3 otter
1997 – 1998 tracks / 100 mi (route 1-3)				11.9	26.2	41.6	2.4	2.4 fox 3.6 otter
1996 – 1997 tracks / 100 mi (route 1-3)				13.8	37.9	36.8	5.7	4.6 fox 2.3 otter 2.3 porcupine 1.1 bear
1995 – 1996 tracks / 100 mi (route 1-3)				11.0	36.7	11.0	2.8	11.9 fox